COVID-19 Monthly Epidemiological Report 12/15/2020

Unless otherwise indicated, analyses conducted for this report are extracted from Texas Health Trace on 12/6/2020.

Key Takeaways from this Report Cases

- 91% of cases at this point are estimated to be recovered. Approximately **10% of cases to date are indicated as having been asymptomatic** at the time they were investigated.
- Those in their **20's** consistently account for 1/5th of total cases to date, as well as 1/5th of cases that occurred in November. Pediatrics (<18 years old) accounted for 18.8% of cases occurring in November.
- About 480 school-related cases were reported in November, showing an increase from previous months.

Hospitalizations and Deaths

- Approximately 4,600 hospitalizations (5% of cases) due to COVID-19 have since March 2020.
- Among pediatric cases, **Hispanic/Latinos** are disproportionately hospitalized compared to their proportion in the population.
- Cases aged 65+ and 41-64 have the highest average days spent in the hospital.
- More males than females have died as a result of COVID-19 in Bexar County.

Increase in Cases

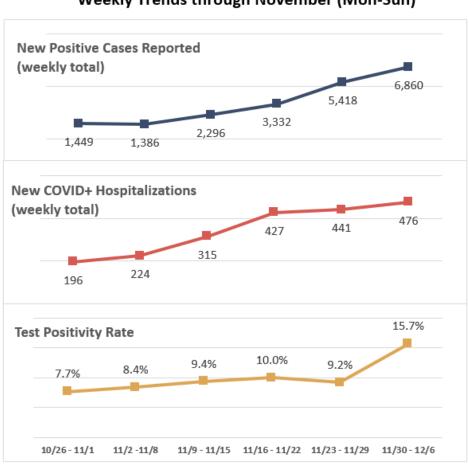
• Compared to October, November saw an increase in COVID-19 cases across the county.

I. Current Status and Overview of COVID-19 in Bexar County

Weekly Trends through November (Mon-Sun)

Nine months into the COVID-19 Pandemic, Bexar County has reported nearly 85,000 COVID-19 cases, and 1,380 deaths attributed to infection with the virus.

Bexar County experienced a major surge in cases in June and July, but moved out of exponential transmission moving into August and September. October saw the early indicators of a return to rapid spread of the virus, with a surge toward the end of October gaining momentum throughout the month of November.



NOTE: New case and hospital admissions data reflect dates reported.



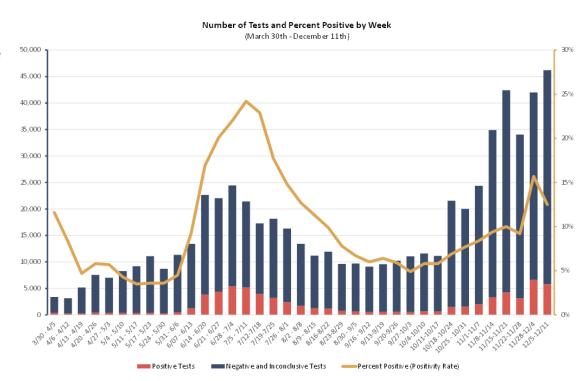
II. Testing & Positivity Rate

Bexar County's COVID-19 weekly positivity rate began climbing in early June and reached a record high in early July (24.2%), indicating the height of the 2-month surge that we experienced across June and July. Since then the weekly positivity rate declined, but has seen an increase since October.

Source: Aggregate Labs

The highest reported

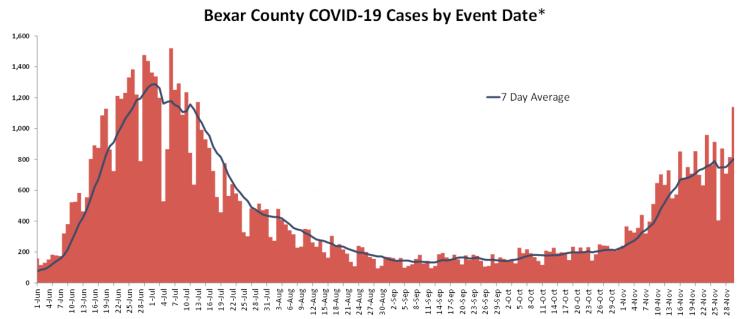
Positivity Rate in November was 15.7%.



Report of labs conducting COVID-19 testing.

III. Trends & Demographic Characteristics among COVID-19 Cases

October and November have seen a continuous increase in COVID-19 cases, with case numbers eventually climbing above 1,000 per day. As we move into the month of December and the remainder of the holiday season, preliminary data suggests that this increase may continue.



*Event date refers to either illness onset date (for symptomatics) or test collection date (for asymptomatics or when onset date not available. This differs from Reported Date

^{**}Data for days not shown or lightened in color have yet to be fully completed

III. A. Age Distribution of Cases

Total Cases by Age Group (N = 85,359)21.5% 18.0% 16.0% 13.2% 10.7% 8.7% 5.4% 4.2% 0.0% 0.5% 0-9 10-19 20-29 30-39 40-49 50-59 60-69 70-79 80-89 90-99 100+

The distribution of COVID-19 cases by agegroup has remained consistent over the past several months.

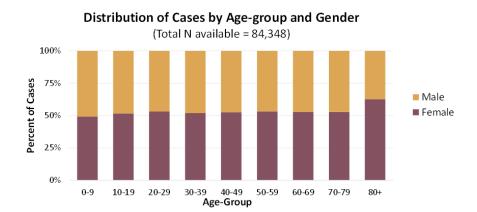
Those in the 20-29 age group consistently account for the largest proportion of cases: 21.5 % of cases to date (i.e. more than 1 in 5) have been in their 20's.

Those 20-49 make up over half of cases through November.

III. B. Gender Distribution of Cases

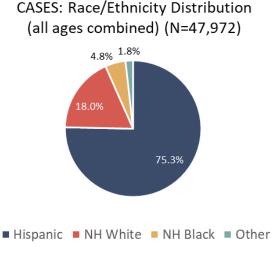
Females account for a slightly larger proportion of total cases to date — 53%.

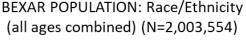
When divided into 10-year age-groups, females demonstrate trends in their case proportionality that align with the general population's gender breakdown.

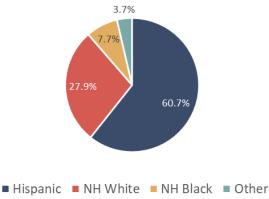


III. C. Race/Ethnicity Distribution

Among cases for whom race/ethnicity data are available, **Hispanic-identifying individuals are substantively over-represented** (and other racial/ethnic identities under-represented), compared to the general population of Bexar County. This may suggest that the pandemic has affected Hispanic-identifying individuals to a greater extent than other racial/ethnic identities. This pattern was observed across every age-group (not shown).

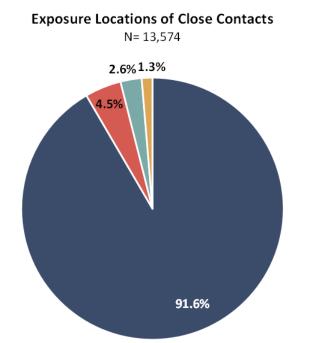








III. D. Characteristics of Close Contacts among Cases



■ Household ■ Other ■ Work ■ Community

Since COVID-19 is transmitted through close contact between persons, identifying the location of exposure is critical in preventing the spread of this disease. The vast majority (91.6%) of close contacts reported being a **household member** of a case.

About 5% of contacts reported "Other" locations such as schools, day cares, healthcare settings, and hotels.

Smaller proportions reported work or the community as their location of exposure, 2.6% and 1.3% respectively.

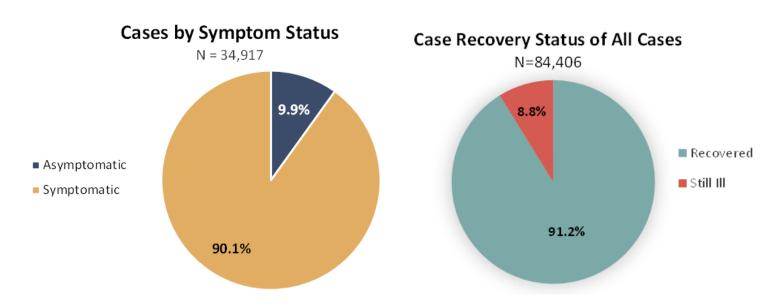
On average, cases have **three to four close contacts** while they are infectious.

These data may not be representative since it is based on only 16% of all cases. The data may be skewed due to reporting and selection biases.

III. E. Symptom Status among Cases

COVID-19 usually presents as symptoms that vary person to person. The majority of individuals experience respiratory symptoms and fever, while others only have new loss of taste and smell. Of all cases that completed an investigation, **only 9.9% were asymptomatic**, meaning that the majority of cases experienced some kind of symptom.

Of all COVID-19 cases in Bexar County, about 1 in 10 are currently still ill.



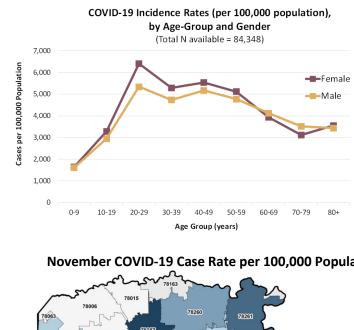
IV. The Extent of COVID-19 in the Bexar County Population

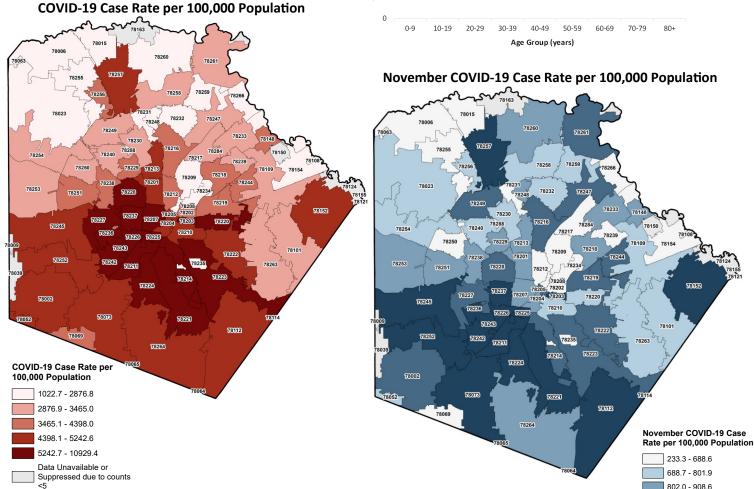
In addition to examining the characteristics among COVID-19 cases, it is also important to examine the extent that COVID-19 has reached in the population. The cumulative COVID-19 case rate (including both probable and confirmed cases) in Bexar County is now **4,264 per 100,000 population**, compared to 3,375 per 100,000 population in October.

The highest incidence rates were observed among age-groups 20-29 through 50-59, particularly among younger adults.

Overall rates of COVID diagnosis (per 100,000) are 4,376 per for Females, and 4,039 for Males. The Female rate is 8% higher than the Male rate.

Among young children and seniors (age 60+), rates do not differ by sex, except in age group 70-79 where the Male rate is higher.





Looking at cases geographically by zip code both overall and during the month of November 2020, the highest case rates tend to occur in the south and southwestern portions of Bexar County. Alternatively, lowest rates tend to occur to the north of Bexar County.

908.7 - 1005.8

1005.9 - 2389.4 Data Unavailable or

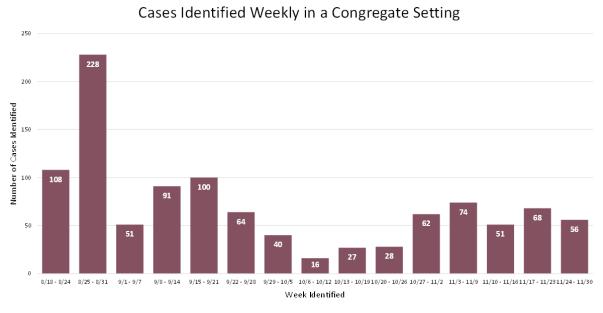
Suppressed due to counts



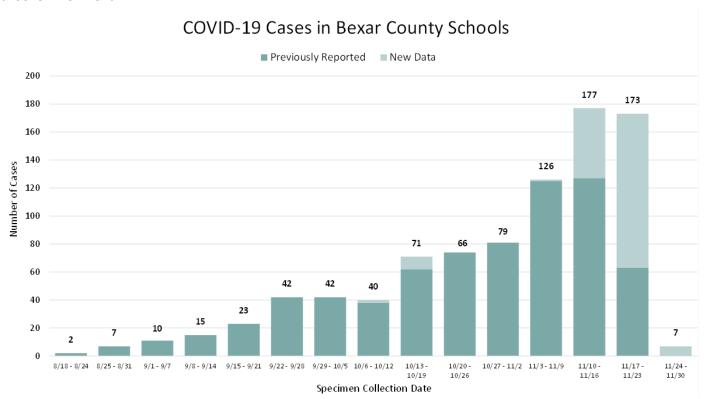
V. Congregate Setting & School-Related Cases

Cases occurring in a congregate setting steadily dropped in the month of September and early October. During late October, cases started to increase again and **Congregate Setting Cases have remained steady throughout November**.

The total number of deaths associated with a congregate setting has **increased to 290** as of November 30th. Based on these data, the number of cases within congregate settings appears to be relatively stable, despite the overall increase in cases in the county.



Based on these data, it appears that cases within schools are **increasing with time**, which mirrors the local trend in cases we have seen. It is important to note that the majority of these cases have been contracted from outside the school environment.



VI. Hospitalizations and Deaths among COVID-19 Cases

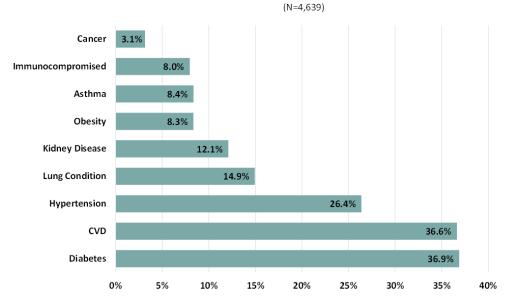
VI. A. Hospitalizations

Approximately 4,600 hospitalizations (5% of cases) due to COVID-19 have since March 2020. Considering event date, overlaid with averages for 7-day new admissions and patient deaths, there is a lag time of approximately one month between peak case count and peak death count. During the period of late October to November 2020, deaths remained relatively stable after decreasing significantly from the late July 2020 peak. At the same time, deaths saw a consistent decrease from the previous peak and leveled off throughout the October-November observation period. 23% of hospitalized cases (Total N=4,639) were in the Intensive Care Unit.

Bexar County Cases by Event Date with 7 Day Averages of Hospital Admit Date & Date of Death



Hospitalized Cases with Underlying Conditions



Of all hospitalized cases, approximately **74% have comorbid conditions.**

Among hospitalized COVID-19 cases with an identified comorbidity, the highest percentage of cases identified having diabetes, followed by cardiovascular disease.

45%

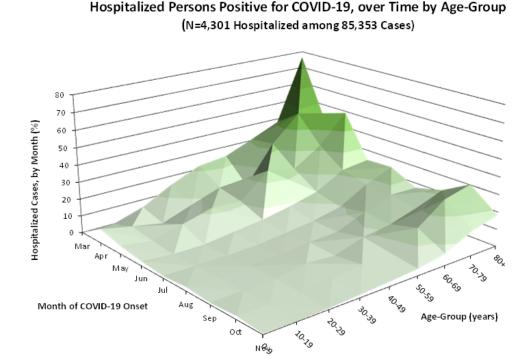


Hospitalization of Bexar County residents with COVID-19 has **decreased over the duration of the pandemic**, from 22% of all COVID-19 cases in March to about 6% since June (November data may be incomplete).

This trend is shown here across all adult age-groups, particularly among the older age groups. The reasoning behind this remains unclear, but may reflect access to more testing and more patients seeking medical care earlier in the disease process. The October increase among older adults (primarily males, data not shown) bears watching.

Note that during the spring months relatively few cases were diagnosed. Testing was limited at the beginning of the pandemic and prioritized for certain populations such as the elderly and individuals with underlying medical conditions.

Additionally, as many as 5-12% of all cases may have been hospitalized for reasons unrelated to COVID-19 infection, and diagnosed incidentally upon admission.

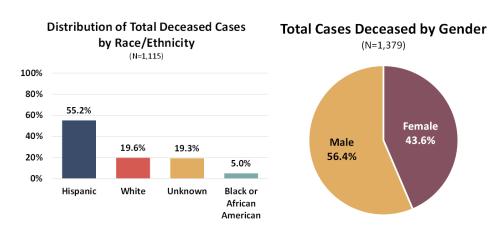


VI. B. Deaths

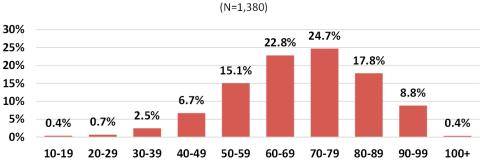
Demographic patterns among deceased COVID-19 cases remains largely similar to previously reported patterns. Of those deaths with identified race/ethnicities, Hispanic COVID-19 cases continue to carry the highest burden of death due to COVID-19.

In November 2020, we continue to see the burden of death in COVID-19 cases is higher in male than in female cases.

Of the age groups we see that ages 60-89 make up more than 60% of all COVID-19 deaths. In particular, 1 in 4 COVID-19 deaths occurred in 70-79 year-olds.



Distribution of Total Deceased by Age

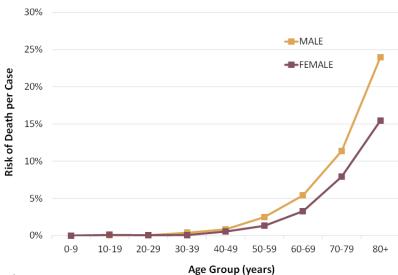


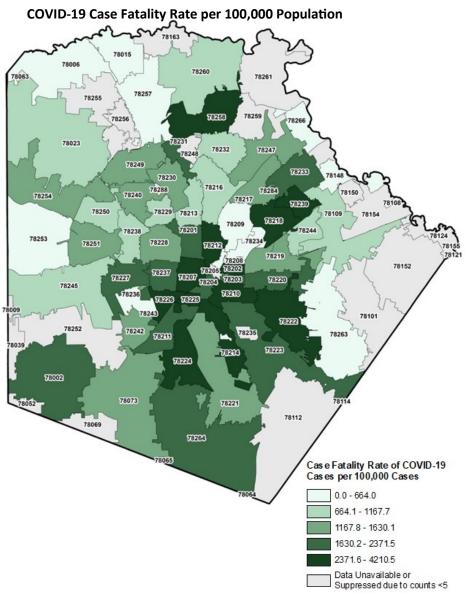
Case Fatality Rates, by Gender and Age-Group

(Total N's available: 1,378 Deaths among 84,348 Cases)

COVID-19 case fatality rates show similar trends to mortality rates in the general population in regards to age and gender. As age increases, risk of death increases. Also, males have higher case fatality rates than females.

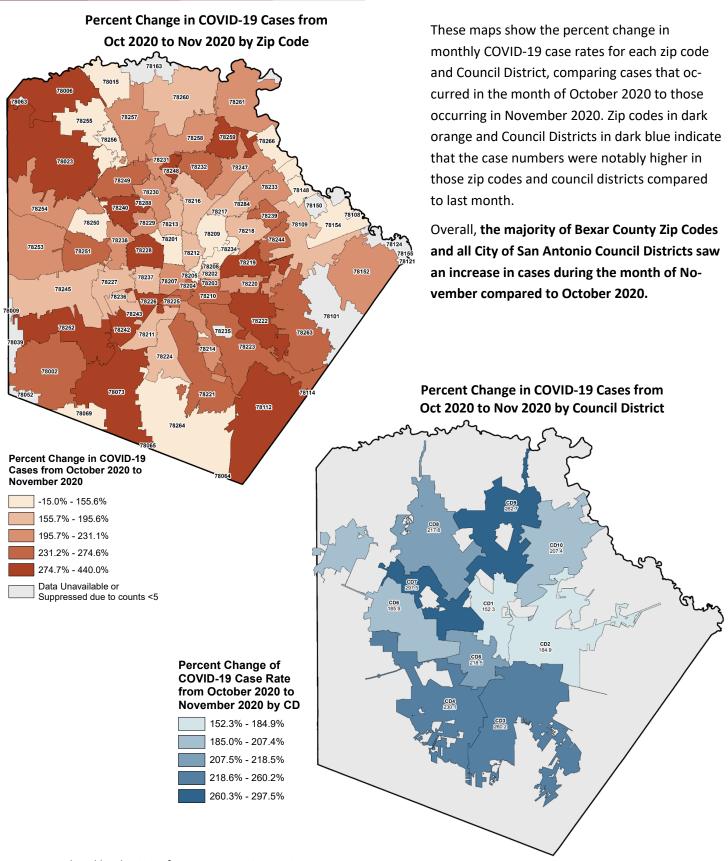
To date, the **overall case fatality rate is 1.6%**. Among females, it is 1.4%; among males 2.0%.





Geographically, the zip codes with the highest Case Fatality rates tend to occur in the zip codes around the center and to the south of Bexar County. Of note, zip code 78224 has one of the highest Case Fatality rates in Bexar County, as well as one of the highest case rates in Bexar County.

VII. Percent Change of COVID-19 Case Rates, October—November



Report completed by the City of San Antonio COVID-19 Response Data Team December 15th, 2020